

**TABLE 1**  
**Sample Locations and Rationale**

Matrix	Sample #	Region 8 Sample #	Location	Rationale	Notes	Lat / Long
Surface Water	UASW001		Animas River downstream of the confluence with Cement Creek	Determine the impact of Cement Creek on the Animas River and the fisheries it supports		
Surface Water	UASW002		Cement Creek immediately upstream of the confluence with the Animas River	Determine contaminant concentrations in Cement Creek immediately upstream of the confluence with Animas River		
Surface Water	UASW003	A68	Animas River upstream of the confluence with Cement Creek	Establish background concentrations in the Animas River		
Surface Water	UASW004		Cement Creek downstream of the confluence with the South Fork of Cement Creek	Determine the impact of the South Fork of Cement Creek on Cement Creek	Background? take a look at SW005 as	
Surface Water	UASW005	CC17	South Fork of Cement Creek	Determine contaminant concentrations in South Fork of Cement Creek	Duplicate and MS/MSD possible background? for downgradient samples?	
Surface Water	UASW006		Cement Creek downstream of the American Tunnel and upstream of the confluence with the South Fork of Cement Creek	Determine the impact of the American Tunnel discharge on Cement Creek		
Surface Water	UASW007	CC18	Discharge from the American Tunnel immediately above confluence with Cement Creek	Determine contaminant concentrations in the American Tunnel Discharge		
Surface Water	UASW008		Cement Creek upstream of the American Tunnel	Determine contaminant concentrations in Cement Creek upstream of the confluence with the American Tunnel discharge		
Surface Water	UASW009		Cement Creek downstream of the confluence with the North Fork of Cement Creek	Determine the impact of the North Fork of Cement Creek on Cement Creek		
Surface Water	UASW010		North Fork of Cement Creek upstream of the confluence with Cement Creek	Determine contaminant concentrations in the North Fork of Cement Creek		
Surface Water	UASW011		North Fork of Cement Creek downstream of the Gold King 7 Level Mine - at road crossing	Determine the impact of the Gold King 7 Level Mine on Cement Creek		
Surface Water	UASW012		North Fork of Cement Creek upstream of the Gold King 7 Level Mine	Determine background in the North Fork of Cement Creek above Gold King 7 Level		
Surface Water	UASW013		Cement Creek upstream of the confluence with the North Fork of Cement Creek	Determine contaminant concentrations in Cement Creek upstream of the confluence with the North Fork of Cement Creek		
Surface Water	UASW014		Cement Creek downstream of Red and Bonita Mine	Determine the impact of Red and Bonita Mine on Cement Creek		
Surface Water	UASW015	CC03D	Drainage channel adjacent to county road below Red and Bonita	Determine contaminant concentrations at the base of the Red and Bonita piles		
Surface Water	UASW016	OPP12	Cement Creek upstream of Red and Bonita Mine	Determine contaminant concentrations in Cement Creek prior to the addition of Red and Bonita discharge		
Surface Water	UASW017		Cement Creek downstream of wetland that channels Mogul Mine drainage	Determine the impact of Mogul Mine drainage on Cement Creek		
Surface Water	UASW018		Cement Creek upstream of wetland that contains Mogul Mine drainage	Determine contaminant concentrations in Cement Creek upstream of Mogul Mine		
Surface Water	UASW019		Mogul Mine drainage (in wetland)	Determine contaminant concentrations in Mogul Mine drainage	Duplicate and MS/MSD	
Surface Water	UASW020		Cement Creek upstream of Mogul Mine	Determine contaminant concentrations in Cement Creek upstream of Mogul Mine drainage		

*Should have lat/long in report too - could add to this table*

*ARRSG - Animas River Stakeholders Group*



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Matrix	Sample #	Region 8 Sample #	Location	Rationale	Notes
Surface Water	UASW021		Cement Creek downstream of Mogul North Mine	Determine the impact of Mogul North Mine on Cement Creek	
Surface Water	UASW022	CC02A	Mogul North Mine discharge	Determine contaminant concentrations in Mogul North Mine discharge	
Surface Water	UASW023	CC01T	Cement Creek upstream of Mogul North Mine and downstream of confluence with Lower Ross	Determine contaminant concentrations in Cement Creek tributary upstream of Mogul North Mine	
Surface Water	UASW024	CC01S	Cement Creek downstream of Queen Anne Mine and upstream of confluence with Lower Ross	Determine contaminant concentrations in Cement Creek downstream of Queen Anne Mine and upstream of Mogul Mine	
Surface Water	UASW029	A72	Animas River Below Silverton		
Surface Water	UASW030	CC01F	Lower Ross Basin Drainage upstream of Grand Mogul Mine	Determine contaminant concentrations in Lower Ross Basin Drainage downstream of Adelphin Mine and upstream of Grand Mogul Mine	Background
Surface Water	UASW032		Animas River downstream of the confluence with Mineral Creek	Determine the impact of Mineral Creek on the Animas River	
Surface Water	UASW033	M34	Mineral Creek upstream of the confluence with the Animas River	Determine contaminant concentrations in Mineral Creek	
Surface Water	UASW034		Animas River upstream of the confluence with Mineral Creek	Determine contaminant concentrations in the Animas River upstream of the confluence with Mineral Creek	
Surface Water	UASW035	CC48	Cement Creek downstream of the Kendrick-Gelder Smelter	Determine the impact of the Kendrick-Gelder smelter on Cement Creek	Duplicate and MS/MSD
Surface Water	UASW036		Cement Creek upstream of the Kendrick-Gelder Smelter	Determine contaminant concentrations in Cement Creek upstream of Kendrick-Gelder Smelter	
Surface Water	UASW037		Cement Creek downstream of the Illinois Gulch drainage	Determine the impact of Illinois Gulch drainage on Cement Creek	
Surface Water	UASW039		Cement Creek upstream of the confluence with Illinois Gulch drainage and downstream of Ohio Gulch drainage	Determine contaminant concentrations in Cement Creek upstream of Illinois Gulch drainage and downstream of Ohio Gulch drainage	
Surface Water	UASW040		Ohio Gulch drainage	Determine contaminant concentrations in Ohio Gulch drainage	
Surface Water	UASW041		Cement Creek upstream of the confluence with Ohio Gulch drainage	Determine contaminant concentrations in Cement Creek upstream of Ohio Gulch drainage	
Surface Water	UASW042		Cement Creek downstream of the Anglo Saxon Mine drainage	Determine the impact of Anglo Saxon Mine drainage on Cement Creek	
Surface Water	UASW043		Anglo Saxon Mine drainage	Determine contaminant concentrations in Anglo Saxon Mine drainage	Source ?
Surface Water	UASW044		Cement Creek upstream of the Anglo Saxon Mine and downstream of Minnesota Gulch drainage	Determine contaminant concentrations in Cement Creek upstream of the Anglo Saxon Mine and downstream of Minnesota Gulch drainage	
Surface Water	UASW045		Minnesota Gulch drainage	Determine contaminant concentrations in Minnesota Gulch drainage	
Surface Water	UASW046		Cement Creek upstream of the confluence with Minnesota Gulch drainage	Determine contaminant concentrations in Cement Creek upstream of Minnesota Gulch drainage	

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TABLE 1  
Sample Locations and Rationale

Matrix	Sample #	Region 8 Sample #	Location	Rationale	Notes
Surface Water	UASW047		Cement Creek downstream of the Elk Tunnel and Fairview Gulch	Determine the impact of the Elk Tunnel and Fairview Gulch on Cement Creek	
Surface Water	UASW049		Cement Creek upstream of the confluence with Fairview Gulch and the Elk Tunnel discharge and downstream of Georgia Gulch	Determine contaminant concentrations in Cement Creek upstream of Fairview Gulch and the Elk Tunnel Discharge and downstream of Georgia Gulch	
Surface Water	UASW050		Cement Creek upstream of Georgia Gulch and downstream of the Mammoth Tunnel	Determine the impact of the Mammoth Tunnel on Cement Creek	
Surface Water	UASW054		Prospect Gulch drainage	Determine contaminant concentrations in Prospect Gulch drainage	
Surface Water	UASW056		Cement Creek downstream of the Dry Gulch drainage	Determine the impact of Dry Gulch drainage on Cement Creek	
Surface Water	UASW058		Cement Creek upstream of the confluence with Dry Gulch drainage	Determine contaminant concentrations in Cement Creek upstream of Dry Gulch drainage	
Surface Water <i>same</i>	UASW059	<i>CC01C</i>	Cement Creek at the toe of Grand Mogul Mine <i>discharge of toe isn't Cement Creek is believed to be adit discharge through waste pile</i>	Determine contaminant contributions in Grand Mogul Mine Drainage	
Surface Water <i>same</i>	UAAD001	CC19	American Tunnel discharge (at portal)	Determine contaminant concentrations in American Tunnel Discharge	
Surface Water <i>same</i>	UAAD002	CC06	Upper Gold King 7 Level Mine adit discharge	Determine contaminant concentrations in Gold King 7 Level Mine adit Discharge	
Surface Water <i>same</i>	UAAD003	CC03C	Red and Bonita Mine adit discharge	Determine contaminant concentrations in Red and Bonita Mine adit Discharge	
Surface Water <i>same</i>	UAAD004	CC02D	Mogul Mine adit discharge	Determine contaminant concentrations in Mogul Mine adit Discharge	
Surface Water	UASW097		Duplicate Sample and MS/MSD Sample: Dup of UASW035	MS/MSD is collected to test the precision of laboratory analytical methods. Duplicate is collected to document the precision of sample collection procedures and laboratory analysis.	
Surface Water	UASW098		Duplicate Sample and MS/MSD Sample: Dup of UASW005	MS/MSD is collected to test the precision of laboratory analytical methods. Duplicate is collected to document the precision of sample collection procedures and laboratory analysis.	
Surface Water	UASW099		Duplicate Sample and MS/MSD Sample: Dup of UASW019	MS/MSD is collected to test the precision of laboratory analytical methods. Duplicate is collected to document the precision of sample collection procedures and laboratory analysis.	
Sediment	UASE001		Animas River downstream of the confluence with Cement Creek	Determine the impact of Cement Creek on the Animas River and the fisheries it supports	
Sediment	UASE002		Cement Creek immediately upstream of the confluence with the Animas River	Determine contaminant concentrations in Cement Creek immediately upstream of the confluence with Animas River	
Sediment	UASE003	A68	Animas River upstream of the confluence with Cement Creek	Establish background concentrations in the Animas River	
Sediment	UASE004		Cement Creek downstream of the confluence with the South Fork of Cement Creek	Determine the impact of the South Fork of Cement Creek on Cement Creek	

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*Need to see if some sample IDs from ARSG can be identified with solid matrix samples or if denoted slightly differently*



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Matrix	Sample #	Region 8 Sample #	Location	Rationale	Notes
Sediment	UASE005	CC17	South Fork of Cement Creek	Determine contaminant concentrations in South Fork of Cement Creek	Duplicate and MS/MSD <i>Background?</i>
Sediment	UASE006		Cement Creek downstream of the American Tunnel and upstream of the confluence with the South Fork of Cement Creek	Determine the impact of the American Tunnel discharge on Cement Creek	
Sediment	UASE007	CC18	Discharge from the American Tunnel immediately above confluence with Cement Creek	Determine contaminant concentrations in the American Tunnel Discharge	
Sediment	UASE008		Cement Creek upstream of the American Tunnel	Determine contaminant concentrations in Cement Creek upstream of the confluence with the American Tunnel discharge	
Sediment	UASE009		Cement Creek downstream of the confluence with the North Fork of Cement Creek	Determine the impact of the North Fork of Cement Creek on Cement Creek	
Sediment	UASE010		North Fork of Cement Creek upstream of the confluence with Cement Creek	Determine contaminant concentrations in the North Fork of Cement Creek	<i>make note regarding recollect sample and why - see comment at UASE 060 too</i>
Sediment	UASE011		North Fork of Cement Creek downstream of the Gold King 7 Level Mine - at road crossing	Determine the impact of the Gold King 7 Level Mine on Cement Creek	
Sediment	UASE012		North Fork of Cement Creek upstream of the Gold King 7 Level Mine	Determine background in the North Fork of Cement Creek above Gold King 7 Level	
Sediment	UASE013		Cement Creek upstream of the confluence with the North Fork of Cement Creek	Determine contaminant concentrations in Cement Creek upstream of the confluence with the North Fork of Cement Creek	
Sediment	UASE014		Cement Creek downstream of Red and Bonita Mine	Determine the impact of Red and Bonita Mine on Cement Creek	
Sediment	UASE015	CC03D	Drainage channel adjacent to county road below Red and Bonita	Determine contaminant concentrations at the base of the Red and Bonita piles	
Sediment	UASE016	OPP12	Cement Creek upstream of Red and Bonita Mine	Determine contaminant concentrations in Cement Creek prior to the addition of Red and Bonita discharge	
Sediment	UASE017	<i>give HSG 1D</i>	Cement Creek downstream of wetland that channels Mogul Mine drainage	Determine the impact of Mogul Mine drainage on Cement Creek	
Sediment	UASE018		Cement Creek upstream of wetland that contains Mogul Mine drainage	Determine contaminant concentrations in Cement Creek upstream of Mogul Mine	
Sediment	UASE019		Mogul Mine drainage (in wetland)	Determine contaminant concentrations in Mogul Mine drainage	Duplicate and MS/MSD
Sediment	UASE020		Cement Creek upstream of Mogul Mine	Determine contaminant concentrations in Cement Creek upstream of Mogul Mine drainage	
Sediment	UASE021		Cement Creek downstream of Mogul North Mine	Determine the impact of Mogul North Mine on Cement Creek	
Sediment	UASE022	CC02A	Mogul North Mine discharge	Determine contaminant concentrations in Mogul North Mine discharge	
Sediment	UASE023	CC01T	Cement Creek upstream of Mogul North Mine and downstream of confluence with Lower Ross	Determine contaminant concentrations in Cement Creek tributary upstream of Mogul North Mine	
Sediment	UASE024	CC01S	Cement Creek downstream of Queen Anne Mine and upstream of confluence with Lower Ross	Determine contaminant concentrations in Cement Creek downstream of Queen Anne Mine and upstream of Mogul Mine	

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Matrix	Sample #	Region 8 Sample #	Location	Rationale	Notes
Sediment	UASE029	A72	Animas River Below Silverton		
Sediment	UASE030	CC01F	Lower Ross Basin Drainage upstream of Grand Mogul Mine	Determine contaminant concentrations in Lower Ross Basin Drainage downstream of Adelphin Mine and upstream of Grand Mogul Mine	Background (Comment - this is a better background) ?
Sediment	UASE032		Animas River downstream of the confluence with Mineral Creek	Determine the impact of Mineral Creek on the Animas River	
Sediment	UASE033	M34	Mineral Creek upstream of the confluence with the Animas River	Determine contaminant concentrations in Mineral Creek	
Sediment	UASE034		Animas River upstream of the confluence with Mineral Creek	Determine contaminant concentrations in the Animas River upstream of the confluence with Mineral Creek	
Sediment	UASE035	CC48	Cement Creek downstream of the Kendrick-Gelder Smelter	Determine the impact of the Kendrick-Gelder smelter on Cement Creek	Duplicate and MS/MSD
Sediment	UASE036		Cement Creek upstream of the Kendrick-Gelder Smelter	Determine contaminant concentrations in Cement Creek upstream of Kendrick-Gelder Smelter	
Sediment	UASE037		Cement Creek downstream of the Illinois Gulch drainage	Determine the impact of Illinois Gulch drainage on Cement Creek	
Sediment	UASE039		Cement Creek upstream of the confluence with Illinois Gulch drainage and downstream of Ohio Gulch drainage	Determine contaminant concentrations in Cement Creek upstream of Illinois Gulch drainage and downstream of Ohio Gulch drainage	
Sediment	UASE040		Ohio Gulch drainage	Determine contaminant concentrations in Ohio Gulch drainage	
Sediment	UASE041		Cement Creek upstream of the confluence with Ohio Gulch drainage	Determine contaminant concentrations in Cement Creek upstream of Ohio Gulch drainage	
Sediment	UASE042		Cement Creek downstream of the Anglo Saxon Mine drainage	Determine the impact of Anglo Saxon Mine drainage on Cement Creek	
Sediment	UASE043		Anglo Saxon Mine drainage	Determine contaminant concentrations in Anglo Saxon Mine drainage	
Sediment	UASE044		Cement Creek upstream of the Anglo Saxon Mine and downstream of Minnesota Gulch drainage	Determine contaminant concentrations in Cement Creek upstream of the Anglo Saxon Mine and downstream of Minnesota Gulch drainage	
Sediment	UASE045		Minnesota Gulch drainage	Determine contaminant concentrations in Minnesota Gulch drainage	
Sediment	UASE046		Cement Creek upstream of the confluence with Minnesota Gulch drainage	Determine contaminant concentrations in Cement Creek upstream of Minnesota Gulch drainage	
Sediment	UASE047		Cement Creek downstream of the Elk Tunnel and Fairview Gulch	Determine the impact of the Elk Tunnel and Fairview Gulch on Cement Creek	
Sediment	UASE049		Cement Creek upstream of the confluence with Fairview Gulch and the Elk Tunnel discharge and downstream of Georgia Gulch	Determine contaminant concentrations in Cement Creek upstream of Fairview Gulch and the Elk Tunnel Discharge and downstream of Georgia Gulch	
Sediment	UASE050		Cement Creek upstream of Georgia Gulch and downstream of the Mammoth Tunnel	Determine the impact of the Mammoth Tunnel on Cement Creek	
Sediment	UASE054		Prospect Gulch drainage	Determine contaminant concentrations in Prospect Gulch drainage	



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Matrix	Sample #	Region 8 Sample #	Location	Rationale	Notes
Sediment	UASE056		Cement Creek downstream of the Dry Gulch drainage	Determine the impact of Dry Gulch drainage on Cement Creek	
Sediment	UASE058		Cement Creek upstream of the confluence with Dry Gulch drainage	Determine contaminant concentrations in Cement Creek upstream of Dry Gulch drainage	
Sediment	UASE059		Cement Creek at the toe of Grand Mogul Mine = <i>adit discharge through waste pile</i>	Determine contaminant contributions in Grand Mogul Mine Drainage	
Sediment	UASE060		Re-collect of UASE010: North Fork of Cement Creek upstream of the confluence with Cement Creek	Determine contaminant concentrations in the North Fork of Cement Creek	<i>why was recollect necessary? End one sample result got discarded, rejected or?</i>
	UASE097		Duplicate Sample and MS/MSD Sample: Dup of UASE035	MS/MSD is collected to test the precision of laboratory analytical methods. Duplicate is collected to document the precision of sample collection procedures and laboratory analysis.	
	UASE098		Duplicate Sample and MS/MSD Sample: Dup of UASE005	MS/MSD is collected to test the precision of laboratory analytical methods. Duplicate is collected to document the precision of sample collection procedures and laboratory analysis.	
	UASE099		Duplicate Sample and MS/MSD Sample: Dup of UASE019	MS/MSD is collected to test the precision of laboratory analytical methods. Duplicate is collected to document the precision of sample collection procedures and laboratory analysis.	
Soil	UASO001		American Tunnel	Characterize source in vicinity of American Tunnel	
Soil	UASO002		American Tunnel	Characterize source in vicinity of American Tunnel	
Soil	UASO003		Red and Bonita Mine - top pile	Characterize source at Red and Bonita Mine	
Soil	UASO004		Red and Bonita Mine - middle pile	Characterize source at Red and Bonita Mine	
Soil	UASO005		Red and Bonita Mine - bottom pile	Characterize source at Red and Bonita Mine	
Soil	UASO006		Mogul North Mine waste pile	Characterize source at North Mogul Mine	
Soil	UASO007		Grand Mogul stope - west side	Characterize source at Grand Mogul Stope	
Soil	UASO008		Grand Mogul stope - east side	Characterize source at Grand Mogul Stope	
Soil	UASO009		Grand Mogul Mine waste piles - east side	Characterize source at Grand Mogul Mine	
Soil	UASO010		Grand Mogul Mine waste piles - center	Characterize source at Grand Mogul Mine	
Soil	UASO011		Grand Mogul Mine waste piles - west side	Characterize source at Grand Mogul Mine	
Soil	UASO012		Mogul Mine waste piles - west side	Characterize source at Mogul Mine	
Soil	UASO013		Mogul Mine waste piles - adjacent to shed	Characterize source at Mogul Mine	
Soil	UASO014		Mogul Mine waste piles - east side	Characterize source at Mogul Mine	